

**MARYLAND HISTORICAL TRUST
NR-ELIGIBILITY REVIEW FORM**

NR Eligible: yes ☐ no ☒

Property Name: Edmondson Avenue Bridge Inventory Number: B-4548
(BC2202)
Address: Gwynns Falls City: Baltimore Zip Code: 21223
County: Baltimore City USGS Topographic Map: Baltimore West, MD
Owner: Baltimore City

Tax Parcel Number: N/A Tax Map Number: N/A Tax Account ID Number: N/A

Project: Proposed Phase 2 Gwynns Falls Pathway Agency: Maryland State Highway Administration

Site visit by MHT Staff: ☒ no ☐ yes Name: _____ Date: _____

Eligibility recommended ☐ Eligibility **not** recommended ☒

Criteria: ☐ A ☐ B ☐ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☒ None

Is the property located within a historic district? ☒ no ☐ yes Name of district: _____

Is district listed? ☐ no ☐ yes Determined eligible? ☐ no ☐ yes District Inventory Number: _____

Documentation on the property/district is presented in: P.A.C. Spero & Company and Louis Berger & Associates
Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland, 1995.

Description of Property and Eligibility Determination: (Use continuation sheet if necessary and attach map and photo)

The Edmonson Avenue reinforced concrete bridge was originally constructed with the following dimensions: total length of 541'-8"; length between the abutments 360'-0"; two 60.0' semi-circular arches at the east end; the westerly one spanning Gwynns Falls, one 139.0' arch with a 43'-6" rise over the CSX Railroad (formerly the Western Maryland Railroad); and one semi-circular arch of 60' span at the west end. The total, original width of the bridge is 60'-0. The bridge carries US Route 40 over Gwynns Falls and the CSX railroad.

The new bridge replaced the Old Edmonson Street trolley bridge, built between 1879 and 1880, because, structurally, it had become unsafe. In 1906, one of the piers of trolley-bridge cracked six inches or more. Much of the ironwork was in a state of deterioration. The wood on the top was rotten and the whole structure was shaky. The trolley-bridge was significantly smaller in size than the newer Edmonson Street Bridge.

The bridge was widened beginning in 1969, with a new roadbed width of 72'-0" plus sidewalks. The existing concrete railing was removed and replaced with an aluminum railing. At the time of its construction, the Edmonson Street Bridge was the longest structure of its kind in the southern region of the United States. It is a massive and plain structure, decorated with only pilasters, cornices and belt courses.

MARYLAND HISTORICAL TRUST REVIEW	
Eligibility recommended <input type="checkbox"/>	Eligibility not recommended <input checked="" type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input checked="" type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None
Comments: _____	
<u>Andrew Lewis</u> Reviewer, Office of Preservation Services	<u>05/03/01</u> Date
<u>B. Kuntz</u> Reviewer, NR program	<u>5/14/01</u> Date

**MARYLAND HISTORICAL TRUST
NR-ELIBILITY REVIEW FORM**

Continuation Sheet No. 1

B-4548

The Edmonson Avenue Bridge is located in the southwestern area of Baltimore at the junction of Edmonson Road and Gwynns Falls. The bridge is flanked by Hilton Parkway to the west and Ellicott Drive to the east, a largely residential area with light commercial use.

The bridge is named after Dr. Thomas Edmonson who was the City of Baltimore's first major art collector. In 1876, the city honored him by changing the name of the long-established Thompson Road to Edmonson Avenue. Proposed by and designed under the direction of the City Engineer in consultation with William J. Douglas, the bridge was erected between March 1908 and July 1910 by the Baltimore Ferro Concrete Company at a cost of \$208,700. C.M. Siquot was the engineer in charge of the contracting company and J. Doyle represented the city.

The Edmonson Avenue Bridge underwent changes since its original construction that have removed historic fabric, materials, and design. Due to major alterations in the appearance of the bridge related to its widening, the Edmonson Avenue Bridge is not eligible for listing on the National Register of Historic Places.

The Edmonson Avenue Bridge is not eligible for listing on the National Register under Criterion A because it does not retain enough historic fabric or reflect enough of the original design to demonstrate an association with transportation developments occurring at the time of its construction.

The Edmonson Avenue Bridge is not eligible for listing on the National Register under Criterion B because it is not associated with the productive years of a person of importance to the local, state, or national level.

The Edmonson Avenue Bridge is not eligible for listing on the National Register under Criterion C because it is not a unique example of 20th century bridge construction and does, nor does it retain enough historic fabric to demonstrate early 20th century concrete-type construction bridge-building.

The Edmonson Avenue Bridge environs are unlikely to yield new information in terms of archaeological study of the area, and is therefore, not eligible for listing on the National Register under Criterion D.

Prepared by:

Ward Bucher, Lisa Johnson,
Megan Shilling

Date Prepared: March 2001

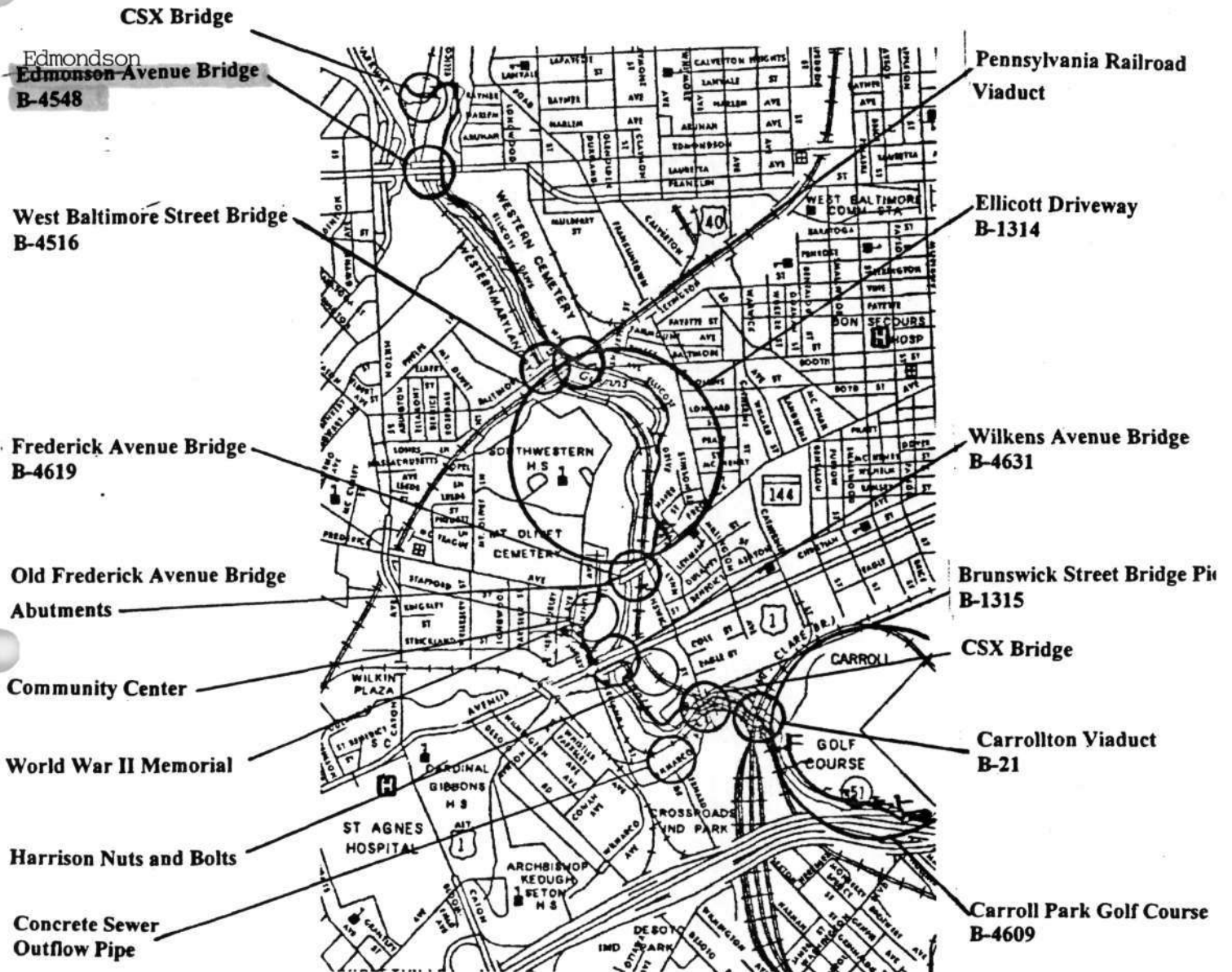


Figure 1. Map Showing Gwynns Falls Area including the Proposed Phase 2 Pathway.



MIHP #: B-4548
EDMONSON AVENUE BRIDGE
BALTIMORE CITY, MD
WARD BUCHER
MARCH 2000

VIEW TAKEN LOOKING NORTH AT EDMONSON AVENUE BRIDGE
FROM ELIZABETH DRIVEWAY

#1 OF 1

217311

Maryland Historical Trust

Maryland Inventory of Historic Properties number: B-4548

Name: US 40 (EDMONDSON AVE) OVER GWYNNE FALLS
CSX RR

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended _____	Eligibility Not Recommended <u>X</u> _____
Criteria: <u> </u> A <u> </u> B <u> </u> C <u> </u> D	Considerations: <u> </u> A <u> </u> B <u> </u> C <u> </u> D <u> </u> E <u> </u> F <u> </u> G <u> </u> None
Comments: _____	

Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

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MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. B-4548

SHA Bridge No. BC 2202 Bridge name US 40 (Edmondson Avenue) over Gwynns Falls and CSXRR

LOCATION:

Street/Road name and number [facility carried] US 40 (Edmondson Avenue)

City/town Baltimore Vicinity _____

County Baltimore

This bridge projects over: Road _____ Railway X Water X Land _____

Ownership: State _____ County _____ Municipal X Other _____

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes _____ No X

National Register-listed district _____ National Register-determined-eligible district _____

Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:

Timber Bridge _____:

Beam Bridge _____ Truss -Covered _____ Trestle _____ Timber-And-Concrete _____

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge _____:

Swing _____

Vertical Lift _____

Bascule Single Leaf _____

Retractable _____

Bascule Multiple Leaf _____

Pontoon _____

Metal Girder X _____:

Rolled Girder X _____

Plate Girder _____

Rolled Girder Concrete Encased _____

Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete X _____:

Concrete Arch X Concrete Slab _____ Concrete Beam _____ Rigid Frame _____

Other _____ Type Name _____

DESCRIPTION:

Setting:	Urban	X	Small town	Rural
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Describe Setting:

Bridge BC 2202 carries Edmondson Avenue (US 40) over Gwynns Falls and CSX Railroad in Baltimore City. Edmondson Avenue (US 40) runs east-west and the Gwynns Falls and CSX Railroad extend north-south. The bridge is located in the City of Baltimore.

Describe Superstructure and Substructure:

Bridge BC 2202 is a 4-span, 6-lane, closed concrete arch bridge. The bridge was originally built in 1909, and was widened with the addition of two steel girders on each side of the arches in 1970. The structure is 120.7 meters (396 feet) long and has a clear roadway width of 22 meters (72 feet); there are sidewalks on both the north and south sides of the bridge each measuring 1.5 meters (5 feet) wide. The out-to-out width is 26.8 meters (88 feet). The superstructure consists of four arches which support a concrete deck and concrete parapet. The arches span 26 meters (85 feet), 44.7 meters (146.5 feet), 27.4 meters (89.75 feet) and 22.3 meters (73.25 feet) with a clear height of 13.4 meters (44 feet) above the CSX Railroad line. The concrete deck has a bituminous wearing surface. The structure has solid concrete parapets topped with a metal handrail. The substructure consists of two concrete abutments and three concrete piers. There are four concrete wingwalls. The bridge is posted at 31.7 tonnes (35 tons) for HS vehicles and 24.5 tonnes (27 tons) for MD Type 3 vehicles. The bridge has a sufficiency rating of 84.1.

According to the 1995 inspection report, this structure was in satisfactory condition with cracking and spalling. The asphalt wearing surface has minor random cracking, while the underside of the deck has minor isolated spalls. The curbs and sidewalks contain minor cracks and spalls randomly located throughout. The steel girders of the superstructure have light surface rust and peeling paint. The lower web areas of all steel girders on the south side of the arch are heavily rusted at the abutment bearings with significant section loss. The spandrel walls of the concrete arches typically have cracks with minor efflorescence. The arch floorbeams typically contain longitudinal open fractures and areas of delamination on their bottom surface over the two exterior bays. The abutments are in good condition with minor spalls, cracks and light efflorescence. The west abutment backwall is spalled and delaminated over most of its surface. The northeast, southeast and southwest wingwalls are cracked vertically for the entire height.

Discuss Major Alterations:

According to the 1995 Bridge Inspection Report, the bridge was widened in 1970 by two steel girders on each side of the arch. Also, the entire surface of the arch has been patched.

HISTORY:

WHEN was the bridge built: 1909, 1970
This date is: Actual X Estimated _____
Source of date: Plaque X Design plans _____ City/County bridge files/inspection form X
Other (specify): _____

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

City of Baltimore

WHO was the builder?

The Baltimore Ferro Concrete Company

WHY was the bridge altered?

The bridge was widened to allow more traffic across the bridge.

Was this bridge built as part of an organized bridge-building campaign?

Unknown

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events _____ **B- Person** _____
C- Engineering/architectural character _____

The bridge does not have National Register significance due the widening of the bridge in 1970 with steel girders, and the replacement of the parapets.

Was the bridge constructed in response to significant events in Maryland or local history?

The advent of modern concrete technology fostered a renaissance of arch bridge construction in the United States. Reinforced concrete allowed the arch bridge to be constructed with much more ease than ever before and maintained the load-bearing capabilities of the form. As the structural advantages of reinforced concrete became apparent, the heavy, filled barrel of the arch was lightened into ribs. Spandrel walls were opened, to give a lighter appearance and to decrease dead load. This enabled the concrete arch to become flatter and multi-centered, with longer spans possible. Designers were no longer limited to the semicircular or segmental arch form of the stone arch bridge. The versatility of reinforced concrete permitted development of a variety of economical bridges for use on roads crossing small streams and rivers.

Maryland's roads and bridge improvement programs mirrored economic cycles. The first road improvement of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920-1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the

secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of \$3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund (with an equal sum from the counties) the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had been inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930's.

As the nation's automotive traffic increased in the early twentieth century, local road networks were consolidated, and state highway departments were formed to supervise the construction and improvement of state roads. With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction through the standardization of bridge designs.

The concept and practice of standardization was one of the most important developments in engineering of the twentieth century. In Maryland, as in the rest of the nation, the standardized concrete types became the predominant bridge types built. In the period 1911 to 1920 (the decade in which standardized plans were introduced), beams and slabs constituted 65 percent and arches 35 percent of the extant 29 bridges built in Maryland during this period. In the following decade, 1921-1930, the beam (now the T-beam) and slab increased to 73 percent and the arch had declined to 27 percent of the 129 extant bridges; in the next decade (1931-1940), the beam and slab achieved 82 percent and arches had further declined, constituting only 18 percent of the total of extant bridges built on state-owned roads between 1931 and 1946.

Although beam and slab bridges became the utilitarian choice, it appears that the arch was selected when aesthetic as well as other site conditions were considered. The architectural treatment of extant arch bridges supports this assessment. Many of these bridges were multiple span structures with open spandrels or masonry facing. Another decorative feature of the concrete arch bridge was an open, balustrade-style parapet. Despite the popularity of ornamental arches and the increase in use of beam and slab bridges, examples of simpler, single and multiple span closed concrete arch bridges with solid parapets continued to be constructed throughout the early twentieth century.

The route of U.S. 40 leading west from the city of Baltimore first developed as a wagon trail to the city of Frederick, established in 1745. The trail later became part of the Baltimore and Frederick Town Turnpike Road, completed in 1808, which was part of a series of turnpikes connecting Baltimore to the beginning of the National Road in Cumberland. The modern section of U.S. 40 extending west from Edmondson Avenue in Baltimore was constructed as a dual highway in 1935 to bypass the old route through Catonsville and Ellicott City.

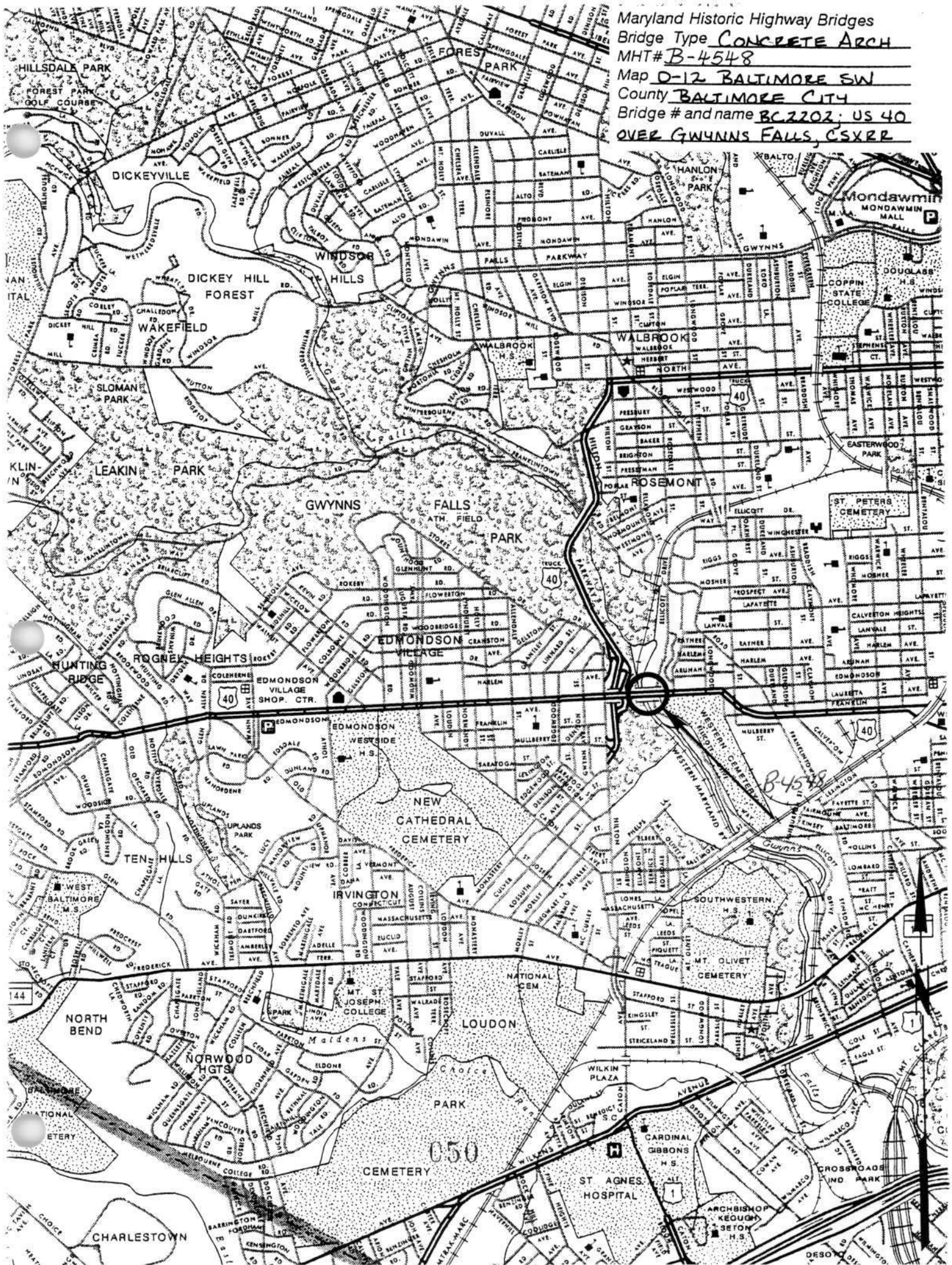
When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

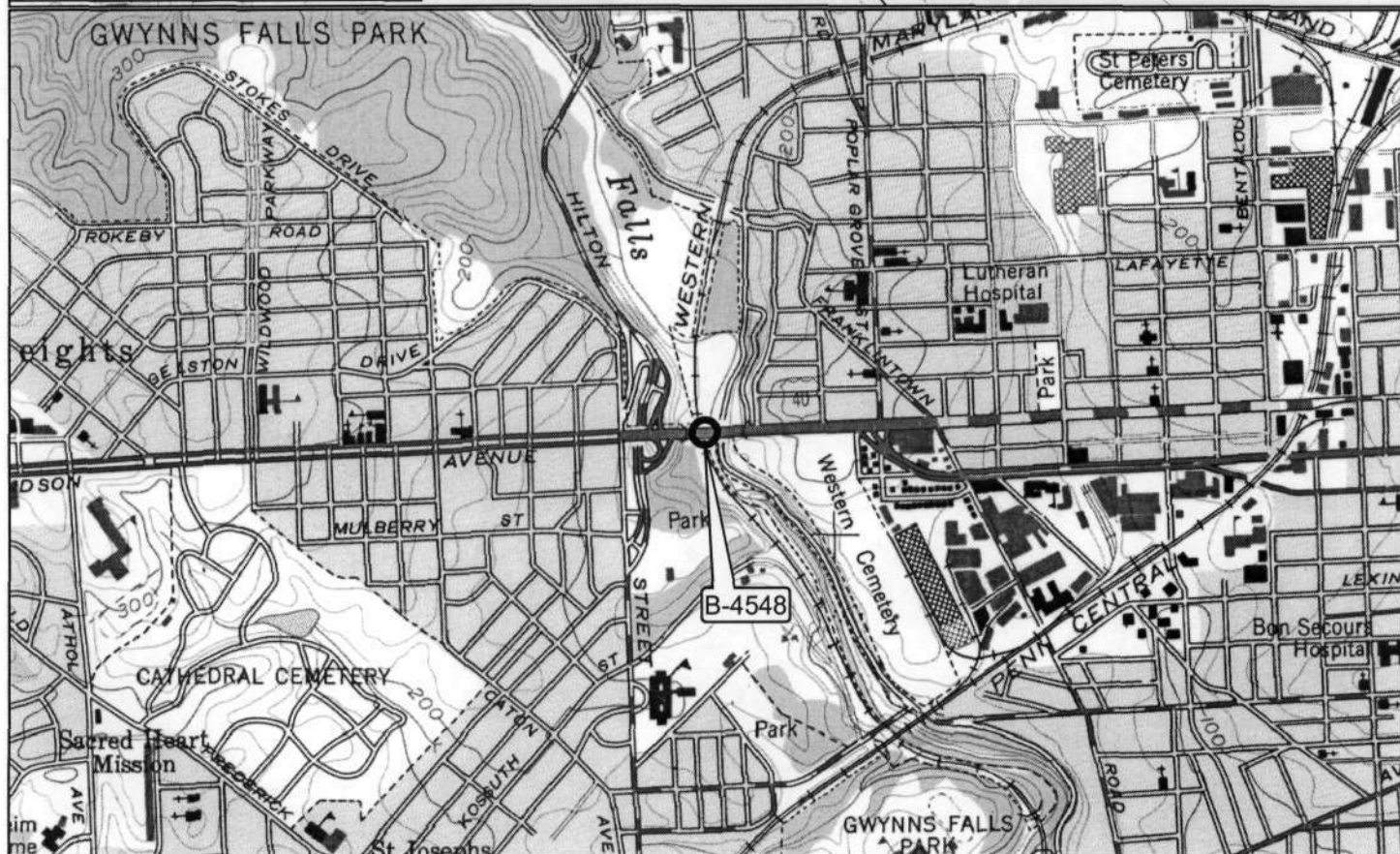
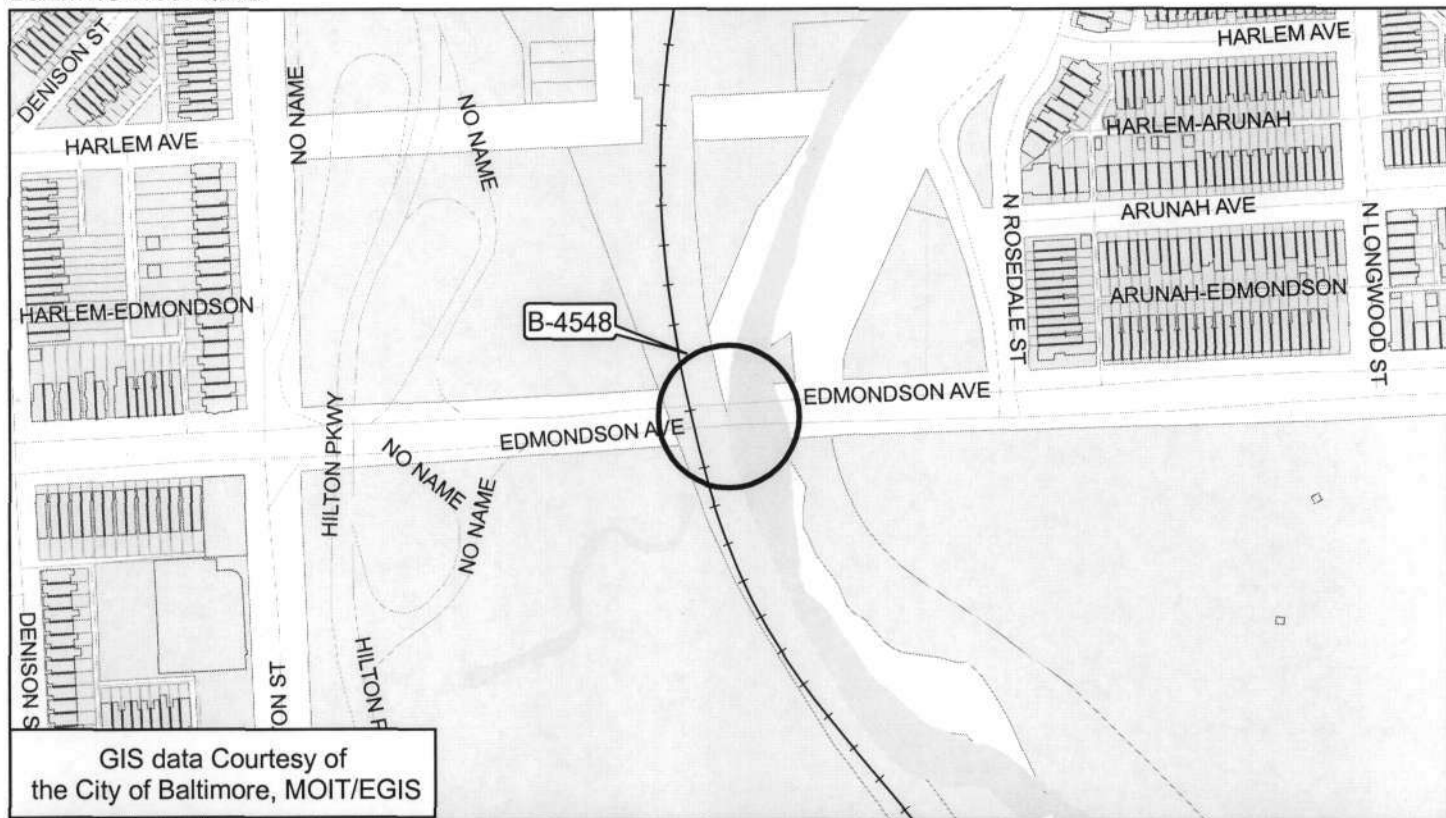
SURVEYOR:**Date bridge recorded** December 1997**Name of surveyor** Wallace, Montgomery & Associates / P.A.C. Spero & Company**Organization/Address** P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204**Phone number** (410) 296-1635**FAX number** (410) 296-1670

Revised by P.A.C. Spero & Company, July 1998.

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# B-4548
Map D-12 BALTIMORE SW
County BALTIMORE CITY
Bridge # and name BC2202: US 40
OVER GWYNNS FALLS, CSXR



B-4548
Edmondson Avenue Bridge (BC2202)
Edmondson Avenue
Baltimore City
Baltimore West Quad.





Inventory # B-4548

2202-US 40 EDMONDSON AVE OVER
Name GWYNNS FALLS AND CSX RR

County/State BALTIMORE CITY/MD

Name of Photographer TIM SCHWEN

Date 1/95

Location of Negative SHA

Description NORTH ELEVATION

Number ~~27~~ of ~~36~~

1 of 5

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Inventory # B-4548

2202-US 40 EDMONDSON AVE OVER
Name GWYNNS FALLS AND CSX RR

County/State BALTIMORE CITY / MD

Name of Photographer TIM SCHOEN

Date 1/95

Location of Negative SHA

Description SOUTH ELEVATION

Number ~~28~~ of ~~36~~ 2 of 5

A · D · MCMIX ·

DESIGNED · AND · CONSTRUCTED

UNDER · THE · DIRECTION · OF ·

B · T · FENDALL · CITY · ENGINEER ·

J · S · DOYLE · ASSISTANT · ENGINEER ·

W · J · DOUGLAS · CONSULTING · ENGINEER ·

CONTRACTORS · THE · BALTIMORE · FERRO · CONCRETE · CO ·

Inventory # B-4548

2202 - US 40 EDMONDSON AVE OVER
Name GWYNN'S FALLS AND CSX RR

County/State BALTIMORE CITY / MD

Name of Photographer TIM SCHEN

Date 1/95

Location of Negative SHA

Description ID PLAQUE AT EAST END OF
NORTH PARAPET

3
Number 21 of 36 5



Inventory # B-4548

2202-US 40 EDMONDSON AVE OVER

Name GWYNNS FALLS AND ESX RR

County/State BALTIMORE CITY / MD

Name of Photographer TIM SCHEN

Date 1/95

Location of Negative SNA

Description EAST APPROACH

Number ~~30~~ of ~~36~~ 485



Inventory # B-4548

2202 - US 40 EDMONDSON AVE OVER

Name GWYNNS FALLS AND CSX RR

County/State BALTIMORE CITY / MD

Name of Photographer TIM SCHOEN

Date 1/95

Location of Negative SNA

Description WEST APPROACH

Number ~~31~~ of 36 585